

In the Claims

Please **cancel** claims **1-64**.

Please **add** claims **65-91**.

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65. (New) A purified and isolated OCIF binding protein.
66. (New) The OCIF-binding protein of claim 65, wherein said protein is a mouse protein.
67. (New) The OCIF-binding protein of claim 66, wherein said protein is a human protein.
68. (New) The OCIF-binding protein of claim 65, wherein said protein exhibits activity promoting osteoclast differentiation and maturation.
69. (New) The OCIF-binding protein of claim 65 or 68, comprising an amino acid sequence selected from the group consisting of SEQ ID NO. 1, SEQ ID NO. 11, SEQ ID NO. 16, SEQ ID NO. 17.
70. (New) A fragment, analog or variant of the OCIF binding protein of claim 69 having the ability to bind OCIF.
71. (New) A fragment, analog, or variant of the OCIF-binding protein of claim 70, further having the ability to promote osteoclast differentiation and maturation.

72. (New) The OCIF-binding protein of claim 65, wherein said protein is soluble.
73. (New) The OCIF-binding protein of claim 65, wherein said protein lacks a transmembrane domane.
74. (New) The OCIF-binding protein of claim 65, wherein said protein is a secreted protein.
75. (New) The OCIF-binding protein of claim 65, wherein said protein is a membrane-bound protein.
76. (New) The OCIF-binding protein of claim 65, wherein said protein is fused to a heterologous protein sequence and retains OCIF-binding activity.
77. (New) A purified and isolated polypeptide encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO 2, SEQ ID NO. 12, SEQ ID NO. 15, SEQ ID NO. 18, SEQ ID NO. 19, or a nucleic acid sequence which hybridizes at 2X SSC, 65°C to the complement of any of SEQ ID NO 2, SEQ ID NO. 12, SEQ ID NO. 15, SEQ ID NO. 18, and SEQ ID NO. 19, said polypeptide having the ability to bind OCIF.
78. (New) The OCIF-binding protein of claim 77, wherein said protein is a recombinant protein produced by the expression in a host cell.
79. (New) The OCIF binding protein of claim 77 or 78, wherein said protein exhibits activity promoting osteoclast differentiation and maturation.
80. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO. 12, SEQ ID NO. 15, SEQ ID NO. 18, and SEQ ID NO. 19.

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- Sub D₄
81. (New) An isolated nucleic acid molecule capable of hybridizing 2X SSC, 65°C to the complement of a nucleic acid sequence comprising SEQ ID NO. 12, SEQ ID NO. 15, SEQ ID NO. 18, and SEQ ID NO. 19, and encoding a protein which binds to OCIF.
- Sub 7₃
82. (New) A DNA fragment amplified using primers comprising SEQ ID NO. 9 and SEQ. ID NO. 6.
83. (New) The DNA fragment of claim 82, wherein said fragment is about 690 bp.
- Sub 7₄
- 85.4 (New) The isolated nucleic acid of claim 80, wherein said OCIF-binding protein comprises amino acid residues 76-316 of SEQ ID NO. 1.
- Sub 8₅
- 86.5 (New) The isolated nucleic acid of claim 80, wherein said OCIF-binding protein comprises amino acid residues 72-316 of SEQ ID NO. 1.
- 87.8 (New) The isolated nucleic acid of claim 80, wherein said OCIF-binding protein comprises the amino acid sequence of SEQ ID NO. 1.
- Sub 8₇
- 88.7 (New) The isolated nucleic acid of claim 80, wherein said nucleic acid suppresses the biological activity of OCIF.
- 89.8 (New) The isolated nucleic acid of claim 80, wherein said OCIF-binding protein comprises the amino acid sequence of SEQ ID NO. 17.
- Sub D₆
- 90.8 (New) The isolated nucleic acid of claim 80, wherein said nucleic acid suppresses the biological activity of OCIF.
- 91.8 (New) A method of recombinantly producing OCIF-binding protein, comprising expressing the nucleic acid of claim 80 in a host cell.